

WHAT IS CLAIMED IS:

1. A portable swing-type digital communication device comprising:
a body housing;
a swing housing rotatably attached to the body housing by means of a
5 hinge module, the swing housing rotatable about a hinge axis at a prescribed
angle perpendicular to the top surface of the body housing, the swing housing
being disposed at a prescribed angle to a planar surface of the body housing
when the swing housing is rotated to a prescribed angle from the body housing;
and
10 a step compensating mechanism for preventing a step between the top
surface of the body housing and the top surface of the swing housing when the
swing housing is rotated to the prescribed angle from the body housing.
2. The device as set forth in claim 1, wherein the body housing comprises:
a first key array and a microphone unit arranged on the top surface thereof,
15 the first key array having a plurality of keys, the microphone unit being disposed
adjacent to the first key array;
a second key array arranged on one of the side surfaces thereof, the
second key array having a plurality of keys; and
a camera lens and a lighting unit arranged on the bottom surface thereof,
20 the lighting unit being disposed adjacent to the camera lens and having a pair of
lighting components.
3. The device as set forth in claim 1, wherein the swing housing has a
speaker unit, a display unit, and a third key array arranged on the top surface

thereof, the display unit being disposed adjacent to the speaker unit, the third key array comprising at least one key disposed adjacent to the display unit.

4. The device as set forth in claim 1, wherein the step compensating mechanism comprises:

- 5 a semicircular section formed at one end of the swing housing;
 a compensating member protruded at a prescribed position of the bottom surface of the swing housing; and
 a recess formed at a prescribed area of the body housing for accommodating the semicircular section and the compensating member of the
10 swing housing while being continuously opposite to the compensating member.

5. The device as set forth in claim 4, wherein the compensating member is formed such that the protruded height of the compensating member is gradually increased from the middle of an outer wall formed at the compensating member to both ends of the outer wall, the protruded height of the compensating member
15 being the largest at the middle of the outer wall.

6. The device as set forth in claim 4, wherein the recess is formed such that the recessed depth of the recess is gradually decreased from the middle of an inner wall formed at the recess to both ends of the inner wall, the recessed depth of the recess being the largest at the middle of the inner wall.

20 7. The device as set forth in claim 4, wherein the compensating member and the recess are formed in the shapes supplementary to each other, and wherein the compensating member has a semicircular top surface, and the recess has a

semicircular bottom surface.

8. The device as set forth in claim 4, wherein the compensating member is completely accommodated in the recess when the swing housing is entirely placed on the body housing, and the compensating member is partially
5 accommodated in the recess when the swing housing is rotated an angle of approximately 180 degrees from the body housing.

9. The device as set forth in claim 1, wherein the third key array is closest to the first key array, and the speaker unit is farthest from the microphone unit when the swing housing is rotated to an angle of approximately 180 degrees
10 from the body housing.